

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

|  |  |  |
|--|--|--|
| Applicant's or agent's file reference<br><b>PJP/44632PCT</b> | <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"><b>FOR FURTHER ACTION</b></div> <div style="font-size: small;">see Form PCT/ISA/220<br/>as well as, where applicable, item 5 below.</div> </div> |  |
| International application No.<br><b>PCT/IB 2004/051837</b>   | International filing date (day/month/year)<br><b>23 Sept 2004</b>  | (Earliest) Priority Date (day/month/year)<br><b>29 Sept 2003</b> |
| Applicant<br><b>NOKIA CORPORATION ET AL</b>                  |  |  |

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 2 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (see Box No. II)

3. ☐ Unity of invention is lacking (see Box No. III)

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB 2004/051837

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H04L 1/00, H04H 1/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: H04B, H04H, H04L, H04J, H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|-----------|---|-----------------------|
| A         | US 20020016933 A1 (SMITH, D E ET AL),<br>7 February 2002 (07.02.2002), abstract<br>--   | 1-28                  |
| P,X       | GB 2399719 A (NOKIA CORP), 22 Sept 2004<br>(22.09.2004), page 3, line 23 - page 5, line 14;<br>page 12, line 8 - line 12; page 13,<br>line 10 - line 17<br>-- | 1-28                  |
| P,A       | WO 2004079956 A1 (NOKIA CORP), 16 Sept 2004<br>(16.09.2004), page 3 - page 4<br>--  | 1-28                  |
| P,A       | WO 2004079982 A1 (NOKIA CORP), 16 Sept 2004<br>(16.09.2004), page 3 - page 4<br>--  | 1-28                  |

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

9 February 2005

Date of mailing of the international search report

11 -02- 2005

Name and mailing address of the ISA/  
Swedish Patent Office  
Box 5055, S-102 42 STOCKHOLM  
Facsimile No. +46 8 666 02 86

Authorized officer

Anders Edlund /LR  
Telephone No. +46 8 782 25 00

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

30/01/2005

International application No.  
PCT/IB 2004/051837

|       |             |    |            |    |             |     |            |
|-------|-------------|----|------------|----|-------------|-----|------------|
| US    | 20020016933 | A1 | 07/02/2002 | US | 6823470     | B   | 23/11/2004 |
|       |             |    |            | AU | 3495001     | A   | 27/08/2001 |
|       |             |    |            | WO | 0161909     | A   | 23/08/2001 |
| ----- |             |    |            |    |             |     |            |
| GB    | 2399719     | A  | 22/09/2004 | GB | 0306184     | D   | 00/00/0000 |
|       |             |    |            | WO | 2004084477  | A,B | 30/09/2004 |
| ----- |             |    |            |    |             |     |            |
| WO    | 2004079956  | A1 | 16/09/2004 | US | 20050013274 | A   | 20/01/2005 |
|       |             |    |            | WO | 2004079982  | A   | 16/09/2004 |
| ----- |             |    |            |    |             |     |            |
| WO    | 2004079982  | A1 | 16/09/2004 | GB | 0306220     | D   | 00/00/0000 |
|       |             |    |            | GB | 0309093     | D   | 00/00/0000 |
|       |             |    |            | US | 20050013274 | A   | 20/01/2005 |
|       |             |    |            | WO | 2004079956  | A   | 16/09/2004 |
| ----- |             |    |            |    |             |     |            |

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:

PIOTROWICZ PAVEL  
20 LITTLE BRITAIN  
LONDON GREATER LONDON EC1A 7DH  
UNITED KINGDOM

# PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

|                                     |            |
|-------------------------------------|------------|
| Date of mailing<br>(day/month/year) | 11-02-2005 |
|-------------------------------------|------------|

Applicant's or agent's file reference  
PJP/44632PCT

**FOR FURTHER ACTION**  
See paragraph 2 below

|  |  |  |
|--|--|--|
| International application No.<br>PCT/IB2004/051837 | International filing date (day/month/year)<br>23-09-2004 | Priority date (day/month/year)<br>29-09-2003 |
|--|--|--|

International Patent Classification (IPC) or both national classification and IPC  
H04L1/00, H04H1/00

Applicant  
NOKIA CORPORATION ET AL

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☒ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further opinions, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA/SE  
Patent- och registreringsverket  
Box 5055  
S-102 42 STOCKHOLM

Authorized officer

Anders Edlund /LR

Facsimile No. +46 8 667 72 88

Telephone No. +46 8 782 25 00

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/IB2004/051837

**Box No. I      Basis of this opinion**

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language, \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing  
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format  
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/IB2004/051837

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

|                               |        |      |     |
|-------------------------------|--------|------|-----|
| Novelty (N)                   | Claims | 1-28 | YES |
|                               | Claims |      | NO  |
| Inventive step (IS)           | Claims | 1-28 | YES |
|                               | Claims |      | NO  |
| Industrial applicability (IA) | Claims | 1-28 | YES |
|                               | Claims |      | NO  |

2. Citations and explanations:

Document cited in the International Search Report:  
D1: US 20020016933 A1

The cited document represents the general state of the art.

The invention defined in claims 1-28 is not disclosed by this document.

The cited prior art does not give any indication that would lead a person skilled in the art to the claimed method, system, network element, encapsulator and terminal for transmitting bursts in a communication network.

Therefore, the claimed invention is not obvious to a person skilled in the art.

Accordingly, the invention defined in claims 1-28 is novel and is considered to involve an inventive step. The invention is industrially applicable.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/IB2004/051837

Box No. VI Certain documents cited

1. Certain published documents (Rules 43bis.1 and 70.10)

| Application No.<br>Patent No. | Publication date<br>(day/month/year) | Filing date<br>(day/month/year) | Priority date (valid claim)<br>(day/month/year) |
|-------------------------------|--------------------------------------|---------------------------------|---|
| GB 2399719 A                  | 22/09/2004                           | 18/03/2003                      |   |
| WO 2004079982 A1              | 16/09/2004                           | 05/03/2004                      | 23/04/2003                                      |
| WO 2004079956 A1              | 16/09/2004                           | 23/04/2003                      | 05/03/2003                                      |

2. Non-written disclosures (Rules 43bis.1 and 70.9)

| Kind of non-written disclosure | Date of non-written disclosure<br>(day/month/year) | Date of written disclosure<br>referring to non-written disclosure<br>(day/month/year) |
|--------------------------------|--|---|
|                                |  |   |